

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of automatically determining a device's nickname in a network based on a peer-to-peer scheme, the method comprising:
recognizing a first device that has been connected to ~~a~~the network without being assigned any nickname, wherein the nickname identifies a characteristic of the first device and can be recognized by the network;
selecting a nickname for the recognized first device from a recommended nickname table which is also connected to the network; and
registering information regarding the selected nickname in a nickname registration-managing module connected to the network.
2. (previously presented): The method as claimed in claim 1, wherein the step of recognizing the first device is performed such that the first device connected to the network requests determination of its own nickname from the recommended nickname table which is included within the first device.
3. (previously presented): The method as claimed in claim 1, wherein the step of recognizing the first device is performed such that the first device having no recommended

nickname table and is connected to the network causes a second device having the recommended nickname table and is connected to the network to request determination of a nickname for the first device.

4. (original): The method as claimed in claim 1, wherein the step of recognizing the first device is performed such that a second device connected to the network searches for the first device connected to the network and requests determination of a nickname for the first device.

5. (previously presented): The method as claimed in any one of claims 1 to 4, further comprising:

determining whether a nickname identical to the selected nickname has already been registered in the nickname registration-managing module;

if a nickname identical to the selected nickname has already been registered in the nickname registration-managing module, selecting a nickname different from the already registered nickname from the recommended nickname table; and

if a nickname identical to the selected nickname has not yet been registered in the nickname registration-managing module, registering the selected nickname.

6. (previously presented): The method as claimed in any one of claims 1 to 4, further comprising:

if it cannot be determined whether a nickname identical to the selected nickname has already been registered in the nickname registration-managing module, using the selected nickname;

if it subsequently becomes possible to determine whether the nickname identical to the selected nickname has already been registered, performing the determination at that time;

if a nickname identical to the selected nickname has already been registered in the nickname registration-managing module, selecting a nickname different from the already registered nickname from the recommended nickname table or other nickname tables; and

if a nickname identical to the selected nickname has not yet been registered in the nickname registration-managing module, registering the selected nickname.

7. (currently amended): A method of avoiding redundant nicknames for devices in a network based on a peer-to-peer scheme, the method comprising:

recognizing a first device that has been connected to the network without being assigned any nickname, wherein the nickname identifies a characteristic of the first device and can be recognized by the network;

selecting a nickname for the recognized first device from a recommended nickname table which is also connected to the network;

causing the first device with the selected nickname, and that is connected to the network, to determine whether a nickname identical to the selected nickname for the first device has

already been registered in a nickname registration-managing module connected to the network;
and

if a nickname identical to the nickname for the first device has already been registered and the already registered nickname is a nickname for a second device different from the first device, requesting that a new nickname be assigned to the first device from the recommended nickname table; and

if a nickname identical to the nickname for the first device has not yet been registered, registering the nickname for the first device in the nickname registration-managing module.

8. (previously presented): The method as claimed in claim 7, wherein if the nickname identical to the nickname for the first device has already been registered and the already registered nickname is the nickname for the first device, the nickname for the first device is used without additional registration of the nickname for the first device.

9. (currently amended): A method of avoiding redundant nicknames for devices in a network based on a peer-to-peer scheme, the method comprising:

recognizing a first device that has been connected to the network without being assigned any nickname, wherein the nickname identifies a characteristic of the first device and can be recognized by the network;

selecting a nickname for the recognized first device from a recommended nickname table or a plurality of synchronized recommended nickname tables connected to the network, and

inactivating the selected nickname so that other devices cannot select the selected nickname from the recommended nickname table or the plurality of synchronized recommended nickname tables; and

registering the selected nickname in a nickname registration-managing module connected to the network.

10. (previously presented): The method as claimed in claim 9, wherein the step of recognizing the first device is performed such that the first device connected to the network requests determination of its own nickname from the recommended nickname table which is included within the first device.

11. (previously presented): The method as claimed in claim 9, wherein the step of recognizing the first device is performed such that the first device having no recommended nickname table and is connected to the network causes a second device having the recommended nickname table and is connected to the network to request determination of a nickname for the first device.

12. (original): The method as claimed in claim 9, wherein the step of recognizing the first device is performed such that a second device connected to the network searches for the first device connected to the network and requests determination of a nickname for the first device.

13. (currently amended): A network system in a network based on a peer-to-peer scheme, comprising:

a recommended nickname table operable to store nicknames for devices connected to a the network;

devices connected to the network which do not have any nickname assigned thereto and that have their nicknames selected from the recommended nickname table; and

a nickname registration-managing module for registering the selected nicknames for the devices if there are no nicknames that have already been registered and that are identical to the nicknames of the devices that have been selected from the recommended nickname table,

wherein the nickname identifies a characteristic of the first device and can be recognized by the network.

14. (currently amended): A device in a network based on a peer-to-peer scheme, comprising:

a discovery protocol by which the device, which is connected to a the network, informs other devices in the network that the device itself is being connected to the network, or other devices are caused to be aware that the device itself has been connected to the network; and

a nickname determination-requesting protocol operable to enable the device connected to the network to request determination of its own nickname,

wherein the device does not have any nickname assigned thereto prior to connecting to the network such that the nickname identifies a characteristic of the first device and can be recognized by the network.

15. (original): The device as claimed in claim 14, further comprising a recommended nickname table operable to store its own nickname or nicknames for other devices.

16. (original): The device as claimed in claim 14 or 15, further comprising a nickname registration-managing module operable to store nicknames if its own nickname or nicknames for other devices are not identical with already registered nicknames.

17. (previously presented): The method as claimed in claim 1, wherein the nickname uniquely identifies a type of device of the first device.

18. (previously presented): The method as claimed in claim 1, wherein the registering information regarding the selected nickname includes writing in the nickname registration-managing module the selected nickname and identification information provided by the first device, the identification information including one of a IP address and a MAC address.

19. (previously presented): The method as claimed in claim 1, wherein the nickname registration-managing module is a distributed domain name server (DNS).

20. (previously presented): The method as claimed in claim 2, wherein the first device has a nickname determination-requesting protocol unit which performs the requesting of the determination of the nickname of the first device.

21. (previously presented): The method as claimed in claim 3, wherein the first device has a nickname determination-requesting protocol unit which causes the second device to request the determination of the nickname of the first device.

22. (previously presented): The method as claimed in claim 4, wherein the second device has a nickname determination-requesting protocol unit which requests the determination of the nickname of the first device upon discovering the first device.

23. (previously presented): The method as claimed in claim 22, wherein if the second device includes the recommended nickname table, the second device performs the selecting of the nickname for the recognized first device from the recommended nickname table which is included in the second device, and if the second device does not include the recommended nickname table, the second device selects the nickname for the recognized first device from another recommended nickname table of another device connected in the network.

24. (previously presented): The method as claimed in claim 11, wherein the recommended nickname table of the second device is synchronized with at least one other recommended nickname table of at least one other device connected in the network.